

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings include changes to Fig. 1 on sheet 1/2 and Fig. 2 on sheet 2/2. Figs. 1 and 2 have been amended so that reference numeral 11a properly points to the expansion chamber.

Attachments: Replacement Sheets [1/2, 2/2; Figs. 1 and 2]

REMARKS

In the Office Action dated September 27, 2006, the Examiner objected to the drawings as failing to comply with 37 CFR § 1.84(p)(4); and rejected claims 26-50 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,561,997 to Weitzel et al. ("Weitzel").

By this Reply, Applicants have amended claims 26, 28, 30, and 36-38 and canceled claim 27. Claims 26 and 28-50 are currently pending in this Application.

Claim 26 has been amended to include, among other things, "a sensor located in the access branch upstream of all blood treatment elements for measuring a first temperature of blood," a "temperature regulating device comprising a line conveying a fluid, said line being coupled to a portion of the return branch downstream of all blood treatment elements to form a heat exchanger directly before blood is returned to the patient" (emphasis added) and "a control unit connected to said temperature regulating device for controlling the blood temperature by controlling the temperature of the fluid conveyed in said line as a function of said first temperature and of a reference temperature." (Emphasis added.) Support for these claim amendments can be found, for example, page 4, lines 24-30; page 5, lines 1-10; page 6, lines 15-20; and Fig. 1.

Claim 38 has been amended to include, among other things, "measuring a first temperature of the blood in correspondence of said access branch upstream of all blood treatment elements" (emphasis added) and "regulating a blood temperature in the extracorporeal blood circuit as a function of the first temperature and of a reference temperature, the blood temperature in the extracorporeal blood circuit being regulated along a portion of the return branch and downstream of all blood treatment elements, directly before blood is returned to the patient." (Emphasis added.) Support for these

claim amendments can be found, for example, page 4, lines 24-30; page 5, lines 1-10; page 6, lines 15-20; and Fig. 1.

The Examiner objected to the drawings as failing to comply with 37 CFR § 1.84(p)(4) "because reference characters '11a' and '11v' have both been used to designate an expansion chamber." (Office Action at 2.) The Examiner required new corrected drawings "because reference number 11a does not properly point to the expansion chamber." (Office Action at 2.) Applicants have amended Fig. 1 on drawing sheet 1/2 and Fig. 2 on drawing sheet 2/2 in accordance with the Examiner's requirement. Reference number 11a in Figs. 1 and 2 has been amended to properly point to the expansion chamber. Therefore, the Examiner's objection has been rendered moot. Accordingly, Applicants respectfully ask that the Examiner withdraw the drawing objection.

Applicants respectfully traverse the Examiner's rejection of claims 26-50 under 35 U.S.C. § 102(e) as being anticipated by Weitzel. Weitzel fails to teach each and every limitation of amended claim 26. The Examiner contends that Weitzel discloses an apparatus having "a sensor/control unit that is capable of '...precise control over fluid flow rate, pressure within the circuit, and temperature of fluid in the circuit' (Column 3, lines 57-59). . . and regulating devices (8 and 34) which are connected to the return branch downstream from the blood treatment device . . [and that] heat exchanger 8 that is connected to the circuit in order to control flow temperature, and a line 16 for conveying fluid." (Office Action at 3.) The Examiner also contends that Weitzel discloses "that the control unit regulates the blood temperature . . . as a function of the blood temperature and the temperature of the body . . . and that the blood temperature

is regulated as a function of the difference between the blood temperature and the reference temperature." (Office Action at 5.) Applicants disagree. In fact, the Examiner fails to provide any citation in Weitzel to support these contentions. Applicants submit that the Examiner's omission is due to the fact that Weitzel does not actually disclose that blood temperature is regulated as a function of the difference between the blood temperature and the reference temperature. Weitzel merely discloses that "[t]he heat exchanger 8 functions to keep blood at a physiological temperature such that any metabolic functions that the treatment device 20 carries out can be accomplished" (col. 6, lines 16-19) and that "the ability to precisely control temperature . . . [is] indicative of some other embodiments of the invention that are contemplated." (Col. 12, lines 56-64.)

More specifically, regarding amended claim 26, Weitzel does not disclose "temperature regulating device comprising a line conveying a fluid, said line being coupled to a portion of the return branch downstream of all blood treatment elements to form a heat exchanger directly before blood is returned to the patient" (emphasis added), as recited in amended claim 26. The heat exchangers identified by the Examiner in Weitzel, 8 and 34, do not form a heat exchanger directly before blood is returned to the patient and downstream of all blood treatment elements. Weitzel discloses the placement of additional blood treatment elements downstream of a heat exchanger. In fact, both heat exchanges, 8 and 34, in Weitzel operate upstream of treatment device 20. (See Figs. 1, 2, and 4; col. 5, lines 32-38; col. 6, lines 15-32.)

Weitzel also does not disclose "a control unit connected to said temperature regulating device for controlling the blood temperature by controlling the temperature of

the fluid conveyed in said line as a function of said first temperature and of a reference temperature" (emphasis added), as recited in amended claim 26. As noted above, temperature is not controlled in Weitzel downstream of all blood treatment elements. Nor does Weitzel disclose any control of temperature flowing back to the patient based on a function of a first temperature of blood leaving a patient and a reference temperature, wherein the control further occurs downstream of all blood treatment elements.

Thus, amended claim 26 is allowable over Weitzel, because Weitzel does not teach each and every limitation of amended claim 26. Accordingly, claims 28-37 are allowable at least due to their dependence from allowable amended claim 26.

For at least the reasons discussed above with respect to amended claim 26, Weitzel also fails to teach each and every limitation of amended claim 38. More specifically, Weitzel does not disclose "measuring a first temperature of the blood in correspondence of said access branch upstream of all blood treatment elements." (Emphasis added.) Nor does Weitzel disclose "regulating a blood temperature in the extracorporeal blood circuit as a function of the first temperature and of a reference temperature, the blood temperature in the extracorporeal blood circuit being regulated along a portion of the return branch and downstream of all blood treatment elements, directly before blood is returned to the patient." (Emphasis added.)

Thus, amended claim 38 is allowable over Weitzel, because Weitzel does not teach each and every limitation of amended claim 38. Accordingly, claims 39-50 are allowable at least due to their dependence from allowable amended claim 38.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: December 21, 2006

By: 
Aaron L. Parker
Reg. No. 50,785

Attachments: Replacement Drawing Sheets [1/2, 2/2; Figs. 1 and 2]